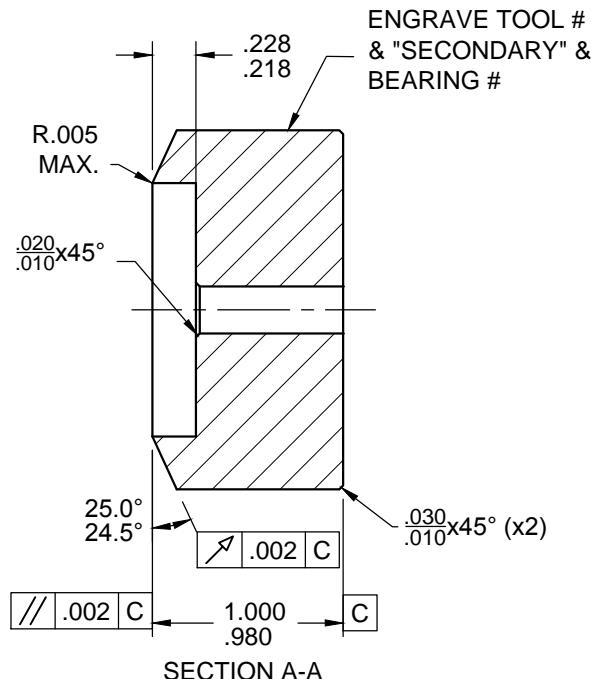
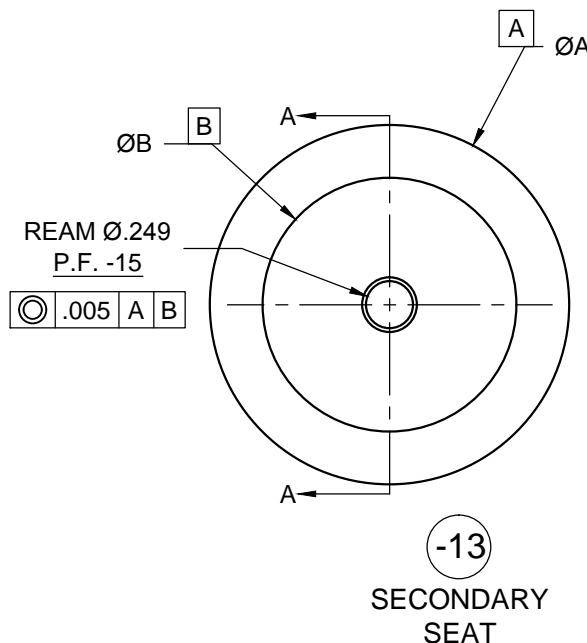


NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

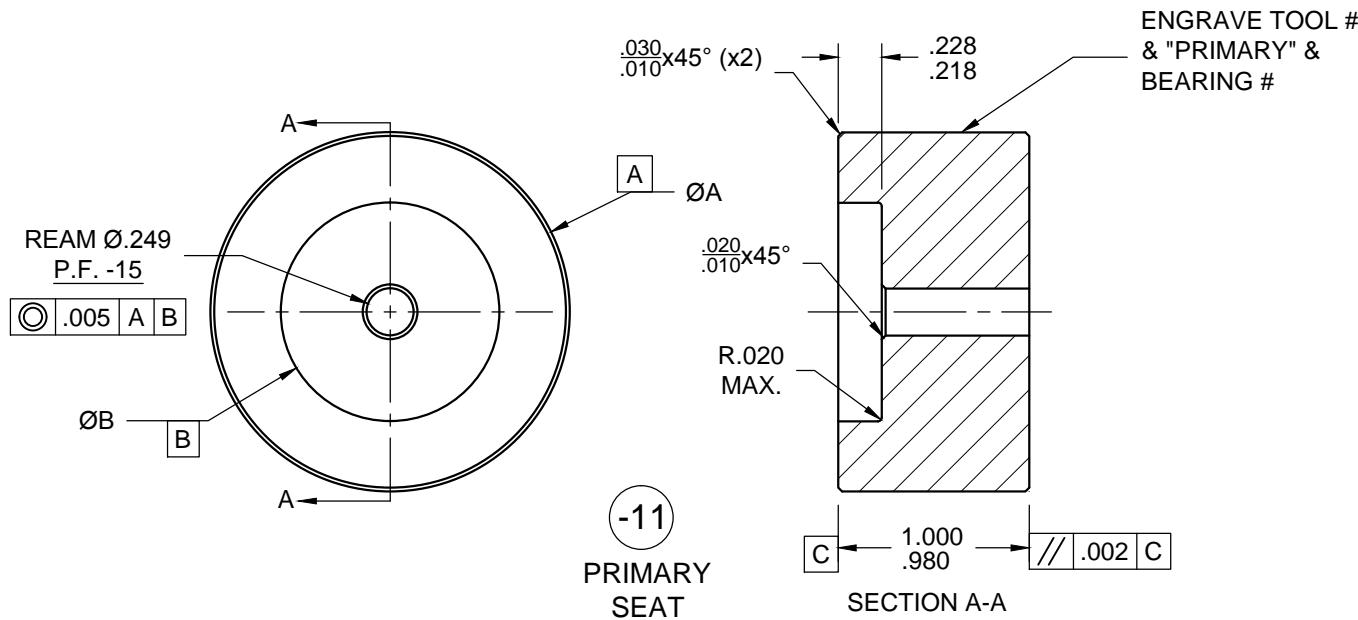
 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO.	(TOOL#) -15 LOCATING PIN
	REV 5
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS $XXX \pm .005$ FRACTIONS $\pm 1/32$ $XX \pm .01$ ANGLES $\pm .5^\circ$ $X \pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	1-31-08
 SHEET 9 of 9	



NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

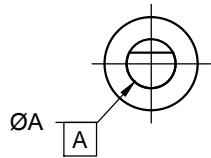
 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO. (TOOL#) -13 SECONDARY SEAT	REV 5
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS $XXX \pm .005$ FRACTIONS $\pm 1/32$ $XX \pm .01$ ANGLES $\pm 5^\circ$ $X \pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR. $.015$ R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-31-08
 SHEET 8 of 9	



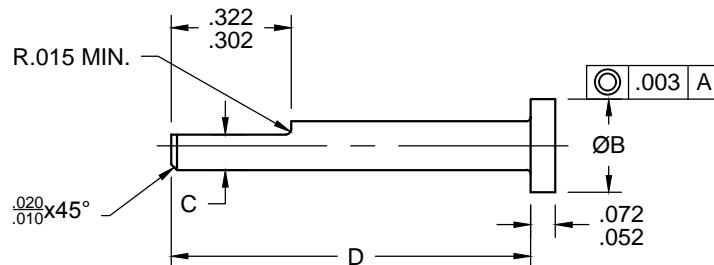
TOOL #	ØA +.000 -.030	ØB +.000 -.005	MATERIAL
KSTFB04	1.125	.572	4140 Q&T RND. BAR Ø1-1/8 x 1-1/8
KSTFB05	1.125	.600	4140 Q&T RND. BAR Ø1-1/4 x 1-1/8
KSTFB05-SP	.920	.600	4140 Q&T RND. BAR Ø1 x 1-1/8
KSTFB06	1.250	.720	4140 Q&T RND. BAR Ø1-1/4 x 1-1/8
KSTFB07	1.375	.845	4140 Q&T RND. BAR Ø1-3/8 x 1-1/8
KSTFB08	1.500	.886	4140 Q&T RND. BAR Ø1-1/2 x 1-1/8
KSTFB09	1.625	.982	4140 Q&T RND. BAR Ø1-5/8 x 1-1/8
KSTFB10	1.750	1.106	4140 Q&T RND. BAR Ø1-3/4 x 1-1/8

NOTES
1. BREAK ALL SHARP CORNERS (.015/.03).

 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO. (TOOL#) -11 PRIMARY SEAT REV 5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 XX ± .01 ANGLES ± .5° X ± .1	
APPROVED	
HEAT TREAT	
FINISH SPEC BLACK OXIDE	
USED ON BEARING	
SEE Pg. 1	
SCALE	NTS
DATE	1-31-08
SHEET 7 of 9	



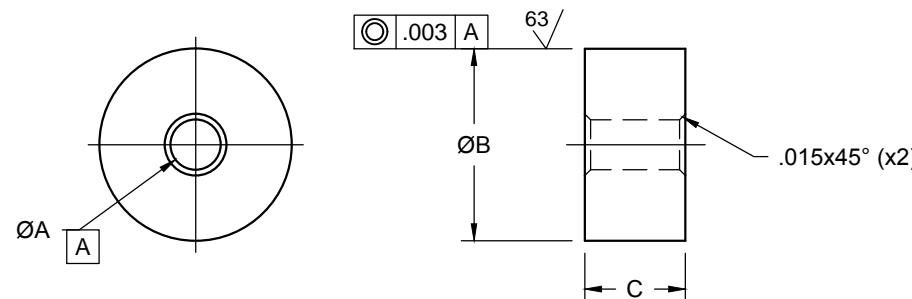
-9
PIN



NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO.	(TOOL #) -9 PIN
REV 5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX \pm .005 FRACTIONS \pm 1/32 .XX \pm .01 ANGLES \pm 5° X \pm .1	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	1-31-08
 SHEET 6 of 9	



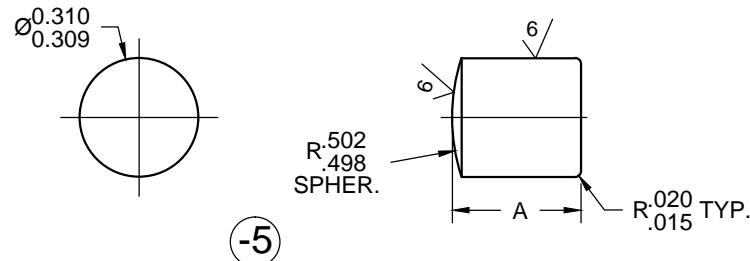
-7

GUIDE

NOTES

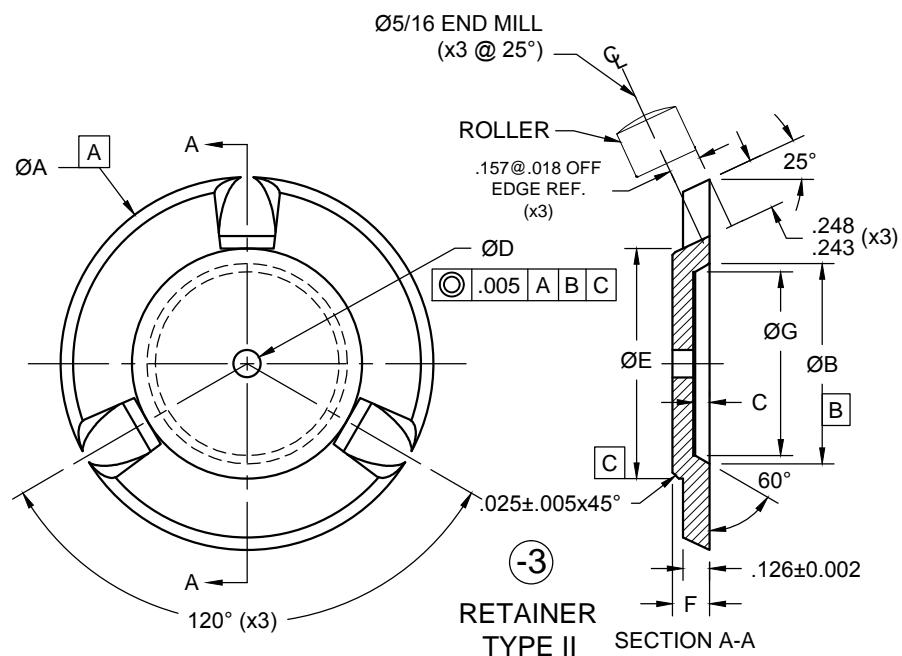
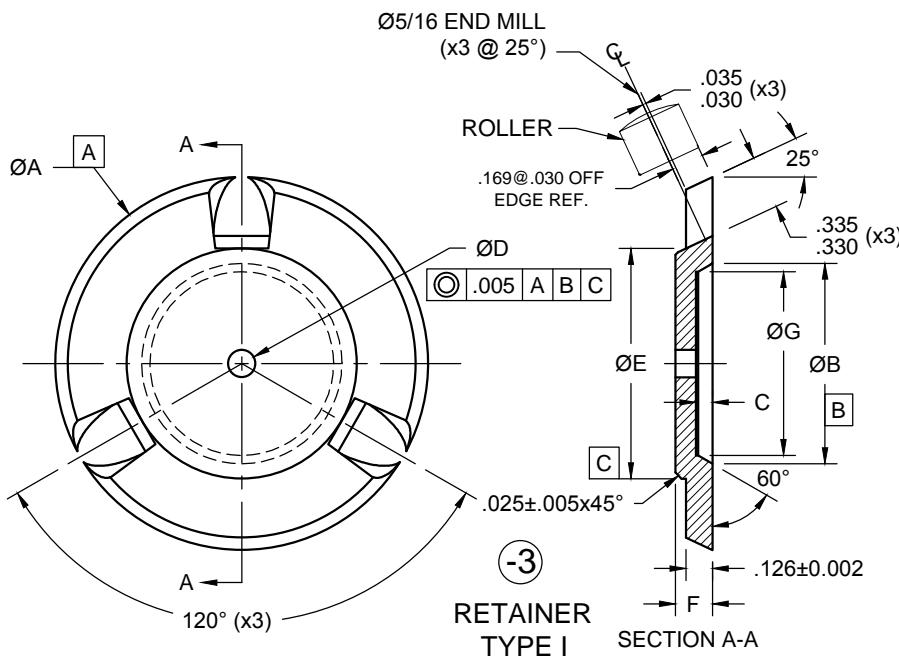
1. BREAK ALL SHARP CORNERS (.015/.03).

 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO.	(TOOL#) - 7 GUIDE
REV 5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS $.XXX \pm .005$ FRACTIONS $\pm 1/32$ $.XX \pm .01$ ANGLES $\pm 5^\circ$ $.X \pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC	
USED ON BEARING SEE Pg. 1	
SCALE	NTS
DATE	1-31-08
SHEET 5 of 9	



ROLLER

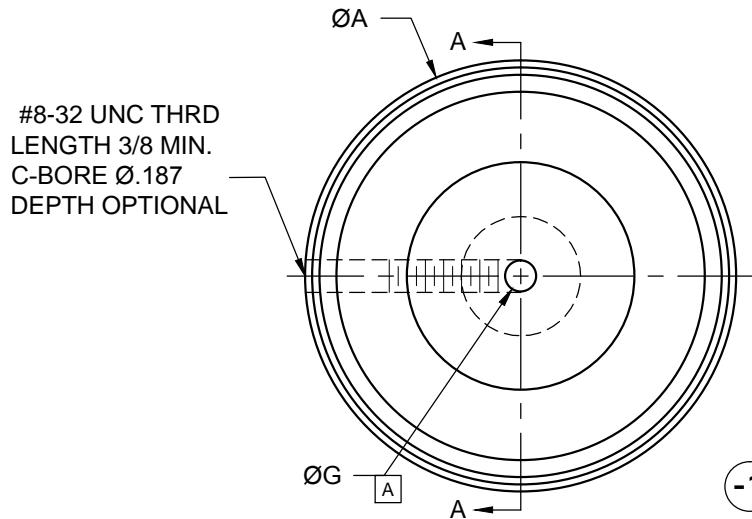
 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO.	(TOOL#) -5 ROLLER (QTY. 3)
REV 5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS $.XXX \pm .005$ FRACTIONS $\pm 1/32$ $.XX \pm .01$ ANGLES $\pm .5^\circ$ $X \pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC	
USED ON BEARING SEE Pg. 1	
SCALE	NTS
DATE	1-31-08
SHEET 4 of 9	



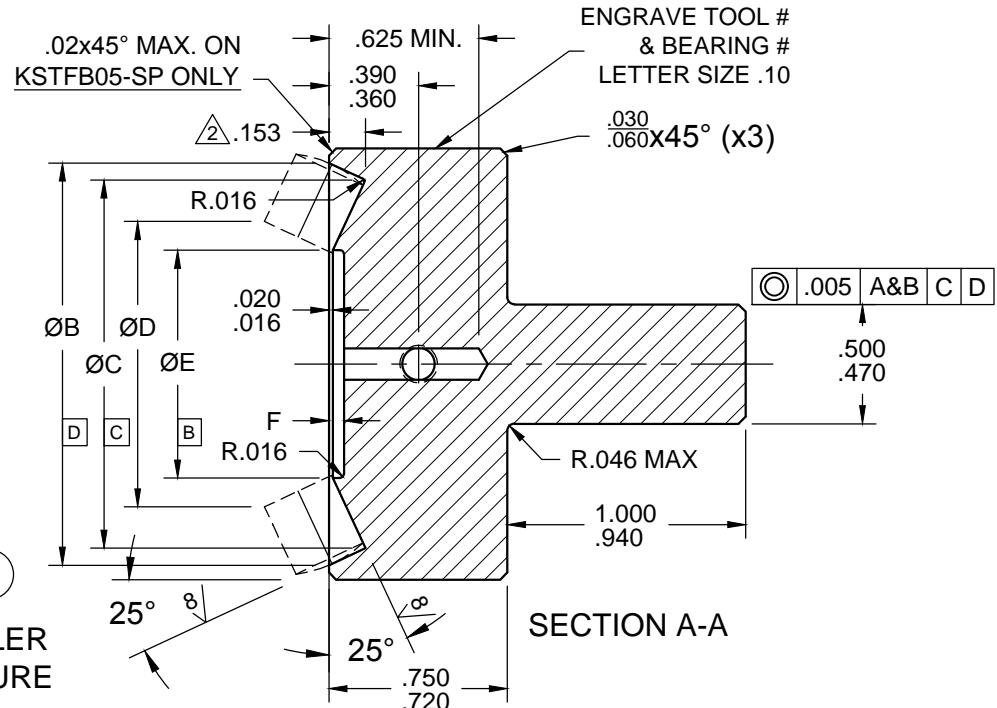
NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

 RED BARN MACHINE	
TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FB BEARINGS	
DWG NO.	(TOOL #) -3 RETAINER
REV 5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
$XXX \pm .005$	FRACTIONS $\pm 1/32$
$.XX \pm .01$	ANGLES $\pm 5^\circ$
$X \pm .1$	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR 015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT	
APPROVED	
HEAT TREAT FINISH SPEC	
USED ON BEARING	
SEE Pg. 1	
SCALE	NTS
DATE	1-31-08
 SHEET	
3 of 9	



#8-32 UNC THRD
LENGTH 3/8 MIN.
C-BORE Ø.187
DEPTH OPTIONAL



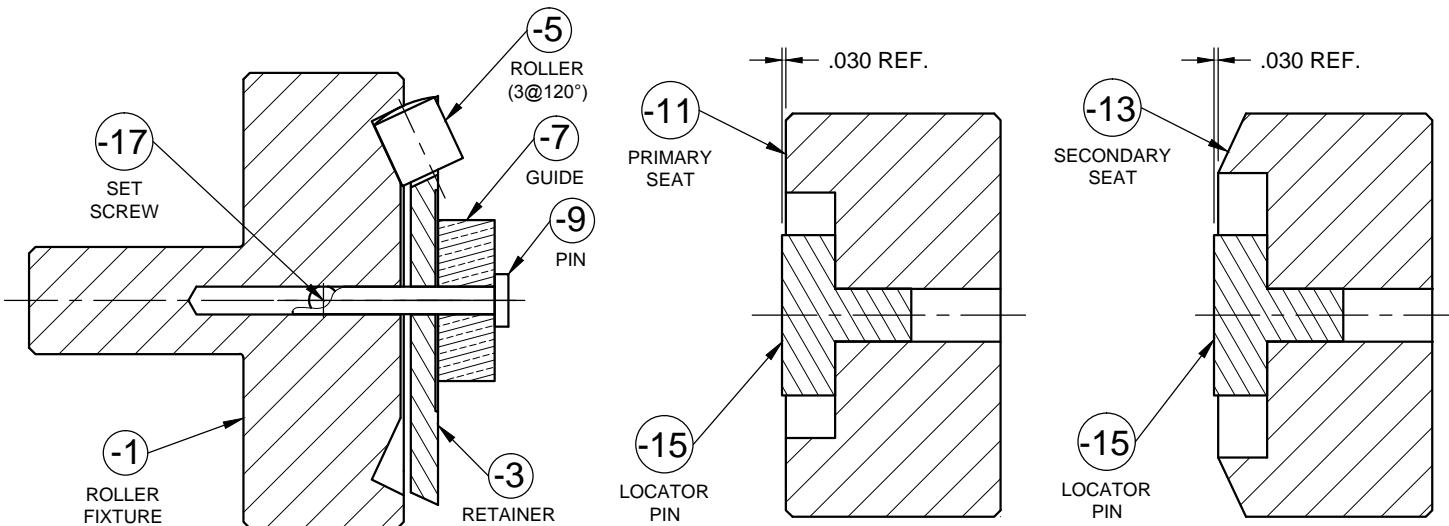
ROLLER FIXTURE

SECTION A-A

NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).
② DIMENSION TO BOTTOM OF R.016=.153;
DIMENSION TO SHARP CORNER=.158.
3. -1 BEARING RACE SURFACES MUST HAVE
SMOOTH APPEARANCE, FREE FROM
MACHINING MARKS AND GROOVES.
4. DO FIRST ARTICLE INSPECTION
BEFORE HEAT TREATING.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	ADDED NOTE TO -1 BODY TO INSPECT BEFORE HEAT TREATING, ALSO CHANGED TOL. OF -1 ROLLER FIXTURE'S ϕ B, ϕ C, & ϕ E FROM +.002-.000.	2/11/08	WP	DW
2	ADDED TOOLS FB06 & FB07. DELETED -13 " ϕ B" DIMENSION AND ASSOCIATED 25° ANGLE, ALSO DELETED -15 TYPE II PIN.	4/18/08	WP	DW
3	CHANGED -15 LOCATING PIN TOLERANCE FROM ϕ .2480- ϕ .2475 TO ϕ .250 P.F.; CHANGED -11 & -13 FROM ϕ .247- ϕ .246 TO REAM ϕ .249.	4/25/08	WP	G.E.
4	ADDED TOOLS #'S KSTFB05, KSTFB08, KSTFB09, KSTFB10. CHANGED -13C DIMENSION TO -13B. REWORKED ALL OF -1 DIMENSIONS TO ALLOW FOR PROPER DEPTH. ALSO CHANGED -5 RADUIS FROM .005-.010 TO .015-.020; -9 PIN RADUIS FROM .015 MAX. TO .015 MIN.; & -7 SLEEVE TO -7 GUIDE.	6-26-08	WP	DW
5	ADDED NEW TOOL KSTFB05-SP, AND CREATED A RETAINER -3 TYPE II TO ACCOMMODATE THE SP (SPECIAL, SMALL SIZE FOR CLEARANCE).	8/22/08	WP	RW



NOTES

1. -5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
2. -5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
3. FLAT END OF ROLLERS MUST FACE TOWARDS THE CENTER OF THE TOOL WHEN ASSEMBLED.

ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	B/O INFORMATION OR SPECIFICATIONS
		-1	1	ROLLER FIXTURE	SEE CHART
		-3	1	RETAINER	SEE CHART
		-5	3	ROLLER	SEE CHART
		-7	1	GUIDE	SEE CHART
		-9	1	PIN	SEE CHART
		-11	1	PRIMARY SEAT	SEE CHART
		-13	1	SECONDARY SEAT	SEE CHART
		-15	2	LOCATING PIN	SEE CHART
B/O		-17	1	SOCKET HEAD SET SCREW	#8-32 x 1/4

RB RED BARN MACHINE

TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS
FOR BACB10FB BEARINGS

**TITLE KSTFB SERIES DP TRI-ROLLER SWAGING TOOLS
FOR BACB10FB BEARINGS**

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOLERANCES ON: APPROVED
DECIMALS
.XXX ± .005 FRACTIONS + 1/32 HEAT TREAT LISTED PER ITEM

XX	± .01"	FRACTIONS ± 1/32	FINISH SPEC	LISTED PER ITEM
X	± 1	ANGLES ± 5°		USED ON BEARING
				SEE ABOVE
		UNLESS OTHERWISE SPECIFIED		
		1. BREAK ALL SHARP EDGES		
		.015 X 45° PR. 015 R		
		2. DIMENSIONAL LIMITS APPLY AFTER PLATING		

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

SSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MAT.	B/O INFORMATION OR SPECIFICATIONS
			-1	1	RND	6061	Ø8-1/4 x 3-7/8
ASSY #							

 RED BARN MACHINE	
TITLE	
DWG NO. _____ R	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS $\pm .005$ FRACTIONS $\pm 1/32$ $\pm .01$ ANGLES $\pm 5^\circ$ $\pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC	
USED ON MODEL	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times .15$ PR 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	8-15-07
SHEET 1 of 1	

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPR
—	—	—	—	—

NOT APPROVED FOR PRODUCTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PART #	QTY	DESCRIPTION
-1	1	--

DRAWN BY: PERRITT	TITLE RED BARN MACHINE
CHECKED	
HEAT	
TREAT	
FINISH SPEC	
USED ON MODEL ?	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX \pm .005 FRACTIONS \pm 1/32 .XX \pm .01 ANGLES \pm 5° .X \pm .1
DWG NO.	PART #
SCALE NTS	DATE 1-28-06
REV.	SHEET 1 of 1

